



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,964	08/04/2003	Kazutaka Inukai	0553-0376	5167

7590 04/25/2007
COOK, ALEX, McFARRON, MANZO,
CUMMINGS & MEHLER, LTD.
SUITE 2850
200 WEST ADAMS STREET
CHICAGO, IL 60606

EXAMINER

LESPERANCE, JEAN E

ART UNIT	PAPER NUMBER
----------	--------------

2629

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/633,964

Applicant(s)

INUKAI, KAZUTAKA

Examiner

Jean E Lesperance

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2,4-9 and 11-40 is/are allowed.
- 6) ☒ Claim(s) 3 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/26/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed February 13, 2007 is entered and claims 2-40 are pending.

Response to Arguments

2. Applicant's arguments with respect to claims 3 and 10 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 3 and 10 are rejected under 35 U.S.C. 102(b) as being unpatentable over US Patent No. 5,952,789 by Stewart et al.

Regarding claim 3, Stewart et al. teach a plurality of pixels arranged in a pixel portion including a plurality of pixel columns (pixel structure Fig.2 (290)),

wherein each one of the pixel columns includes at least two data lines (data lines D1 and D2),

wherein the pixels each have a switching element Fig.2 (T1) and a light emitting element Fig.2 (210), and wherein the switching element Fig.2 (T1) is connected to one of the at least two data lines Fig.2 (data line D1).

Regarding claim 10, Stewart et al. teach the light emitting element comprises an OLED Fig.2 (210).

Allowable Subject Matter

4. Claims 2, 4-9 and 11-40 are allowed.
5. The following is an examiner's statement of reasons for allowance: the claimed invention is directed to a display device.

Independent claim 2 identifies a uniquely distinct feature "wherein at least four data lines extend in each one of the pixel columns, and wherein the at least four data lines are connected to different data drivers".

Independent claims 4, 5, 19, and 20 identify a uniquely distinct feature "at least two data drivers are provided to simultaneously supply signals to at least two pixels selected out of the plurality of pixels through the at least two data lines extending in each one of the pixel columns".

Independent claim 21 identifies a uniquely distinct feature "a second data line of the plurality of data lines is electrically connected to the second switching transistor".

Independent claim 23 identifies a uniquely distinct feature "first data driver for supplying a video signal to the pixels which are arranged in first to $m/2$ -th rows and in odd-numbered rows; a second data driver for supplying a video signal to the pixels which are arranged in first to $m/2$ -th rows and in even-numbered rows; a third data driver for supplying a video signal to the pixels which are arranged in $(m/2+1)$ -th to m -th

rows and in odd-numbered rows; a fourth data driver for supplying a video signal to the pixels which are arranged in $(m/2+1)$ -th to m -th h rows and in even-numbered rows”.

Independent claim 24 identifies a uniquely distinct feature “a second driver for controlling the scanning line extending in the $(m+1)$ -th row; a third driver for controlling the scanning line extending in the $(m+2)$ -th row; and a fourth driver for controlling the scanning line extending in the $(m+3)$ -th row”.

Independent claim 24 identifies a uniquely distinct feature “a first scanning driver for controlling the scanning lines extending in the first to $m/4$ -th rows; a second scanning driver for controlling the scanning lines extending in the $(m/4+1)$ -th row to $m/2$ -th rows; a third scanning driver for controlling the scanning lines extending in the $(m/2+1)$ -th row to $3xm/4$ -th row; a fourth scanning driver for controlling the scanning lines extending in the $(3xm/4+1)$ -th row to m -th row”.

The closest arts, Yamazaki et al. and Kim et al. as discussed above, either singularly or in combination, fail to anticipate or render obvious the above limitations obvious.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Lesperance whose telephone number is (571) 272-7692. The examiner can normally be reached on from Monday to Friday between 10:00AM and 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

Art Unit: 2629

supervisor, Richard Hjerpe, can be reached on (571) 272-7691.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(571) 273-8300 (for Technology Center 2600 only)

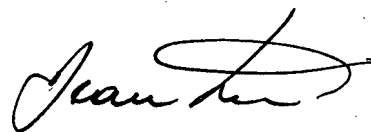
Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Jean Lesperance

Art unit 2629

Date 4/23/2007

A handwritten signature in black ink, appearing to read "Jean Lesperance", with a stylized flourish at the end.